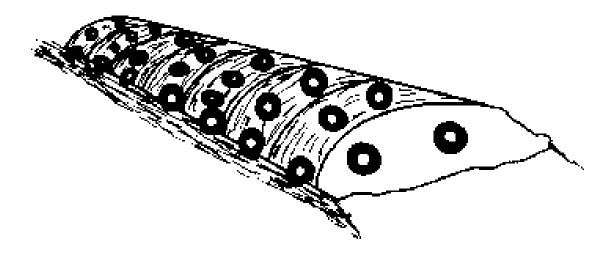


USDA Natural Resources Conservation Service Stillwater, OK

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Temporary Litter Storage



IS TEMPORARY LITTER STORAGE NECESSARY?

Ideally, litter should be spread at a proper rate as it is removed from the production buildings. However, cleanout or cakeout activities do not always coincide with the availability of open cropland or proper weather or soil conditions. It is then necessary to store litter in a manner that will protect the environment until the time at which the litter can be properly utilized.

The preferred method of litter storage is with a roofed storage structure. This job sheet provides details on how to temporarily store litter for those operations which do not have access to roofed litter storage.

GOALS OF LITTER STORAGE

Proper litter storage consists of providing areas which are prepared and maintained in a manner which prevents leachate or percolation through the pile and into the groundwater. In addition to protection of the groundwater, measures shall also be used which prevent runoff through the pile.

LOCATION OF STORAGE

The following guidelines should be followed in selecting the location of the temporary storage pile:

- Do not locate the pile farther than 150 feet from the top of a slope unless overhead water is diverted away from the pile.
- Do not locate the pile closer than 1 foot vertically above the flood plain.
- Do not locate the pile within three feet of a water table.
- Do not locate the pile within 300 feet of wells or springs.
- Do not locate the pile within 300 feet of any drainage that flows into a streams, ponds, or other drainage way.
- Do not locate the pile within 300 feet of neighboring residences or public areas.
- Locate the pile as close as possible to natural windbreaks or other areas that protect the covering from blowing winds.

COVERING

Every temporary litter storage pile must be covered. Use opaque plastic or polyethylene sheeting with a minimum thickness of 6 mil. Greater thickness will provide additional protection against tearing. Weights such as used tires should be placed over the sheeting to anchor it and prevent tearing during high winds. A trench 12 inches deep shall be constructed around the litter pile and the edges of the sheeting buried in the trench.

SIZE OF PILE

The size of the storage pile should be kept as small as possible, and in no case larger than what is required for 60 days storage. If storage is required for more than 60 days, a roofed storage structure should be used.

Pile heights <u>must</u> be kept at less than seven feet. High temperatures are generated in piled litter and under some conditions, spontaneous combustion can occur. If possible, piles should be kept in the five feet high range to avoid the possibility of fire.

PAD OF PILE

Acceptable foundations for storage piles consist of the following:

 Natural soils with low permeability (< 6 "/hr). All trees, brush, and stumps shall be removed prior to litter placement. In addition, any rocks greater than 4 inches in diameter shall be removed.

- Reinforced concrete meeting the requirements in NRCS Conservation Practice Code 313, Waste Storage Facility.
- New synthetic liners at least 20 mil thickness, completely free of all tears or punctures. This liner shall be placed in an overexcavated area 6 inches deep and covered with compacted soil. Compacted soil shall be free of any material that could puncture the liner.
- One foot of compacted clay liner, constructed in two six inch lifts at optimum moisture content.
 Lifts must be free of trees, rocks, roots, etc. greater than 4 inches in diameter.

OPERATION AND MAINTENANCE

Soil pads may require reconstructing if soil is inadvertently removed during the waste removal process.

Permanent vegetation should be established on all disturbed areas.

Plastic or polyethylene coverings will deteriorate over time and need to be replaced.

The pile should be inspected after every major storm event and needed repairs completely promptly.

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